

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A cleaning sheet for removing foreign matter adhering on a tip of a probe needle of a probe card, comprising a cleaning layer having a surface, the surface of the cleaning layer forming one surface of the cleaning sheet, wherein the cleaning layer contains a urethane polymer and a vinyl polymer comprising an acrylic polymer, wherein said cleaning layer does not contain additives that promote wear in amounts within a range in which the probe needle is not worn, and wherein the cleaning layer has an initial elastic modulus within a range of 0.5-100 N/mm² and is adapted to receive penetrating probe needles and remove and retain impurities on a tip of said probe needles such that there will be no re-adhering of the foreign matter or the cleaning layer material on the probe needle after the cleaning operation, and wherein said cleaning layer has a thickness within a range of 10 to 500 μm.

2. (original): The cleaning sheet as claimed in claim 1, wherein the vinyl polymer is an acrylic polymer.

3. (original): The cleaning sheet as claimed in claim 1, wherein the cleaning layer comprises a mixture containing a urethane polymer and a vinyl monomer, the mixture being irradiated with radiation to cure it.

4. (original): The cleaning sheet as claimed in claim 1, wherein the cleaning layer is formed by reacting a polyol and a polyisocyanate in the presence of a vinyl monomer to form the urethane polymer to form a mixture containing the urethane polymer and a vinyl monomer, and irradiating the mixture with radiation to cure it.

5. (original): The cleaning sheet as claimed in claim 1, further comprising a backing layer.

6. (original): The cleaning sheet as claimed in claim 5, further comprising a pressure-sensitive adhesive layer, wherein the cleaning layer is provided on one surface of the backing

layer and the pressure-sensitive adhesive layer is provided on another surface of the backing layer.

7.-12. (canceled)

13. (original): A transporting member comprising a support and the cleaning layer of claim 1 provided on the support.

14. (original): The transporting member as claimed in claim 13, wherein the cleaning sheet is provided on the support through a sticking means.

15. (original): The transporting member as claimed in claim 13, wherein the support is a wafer.

16.-18. (canceled)

19. (currently amended): A method of producing a cleaning sheet, comprising the steps of:

reacting a polyol and a polyisocyanate in the presence of a vinyl monomer to form a urethane polymer, thereby forming a mixture containing the urethane polymer and the vinyl monomer;

coating the mixture on a release sheet or a backing layer; and

irradiating the coated mixture with radiation to cure the mixture to form the cleaning layer,

wherein said cleaning layer ~~does not contain~~ additives ~~that promote wear~~ in amounts within a range in which the probe needle is not worn, and wherein the cleaning layer has an initial elastic modulus within a range of 0.5-100 N/mm² and is adapted to receive penetrating probe needles and remove and retain impurities on a tip of said probe needles such that there will be no re-adhering of the foreign matter or the cleaning layer material on the probe needle after the cleaning operation, and wherein said cleaning layer has a thickness within a range of 10 to 500 μm .

20. (currently amended): A method of cleaning a probe needle, comprising contacting a cleaning layer of the cleaning sheet with a probe needle of a probe card having a tip to remove foreign matter adhering on the tip of the probe needle, wherein said cleaning sheet comprises a cleaning layer having a surface, the surface of the cleaning layer forming one surface of the

cleaning sheet, wherein the cleaning layer contains a urethane polymer and a vinyl polymer comprising an acrylic polymer, wherein, said cleaning layer does not contains additives that promote wear in amounts within a range in which the probe needle is not worn, wherein the cleaning layer has an initial elastic modulus within a range of 0.5-100 N/mm² and is adapted to receive penetrating probe needles and remove and retain impurities on a tip of said probe needles such that there will be no re-adhering of the foreign matter or the cleaning layer material on the probe needle after the cleaning operation, and wherein said cleaning layer has a thickness within a range of 10 to 500 μm.

21. (currently amended): A method of cleaning a probe needle, comprising contacting a cleaning layer of a transporting member with a probe needle of a probe card having a tip to remove foreign matter adhering on the tip of the probe needle, wherein said transporting member comprises a support and a cleaning layer having a surface, the surface of the cleaning layer forming one surface of the transporting member, wherein the cleaning layer contains a urethane polymer and a vinyl polymer comprising an acrylic polymer, wherein said cleaning layer does not contains additives that promote wear in amounts within a range in which the probe needle is not worn, and wherein the cleaning layer has an initial elastic modulus within a range of 0.5-100 N/mm² and is adapted to receive penetrating probe needles and remove and retain impurities on a tip of said probe needles such that there will be no re-adhering of the foreign matter or the cleaning layer material on the probe needle after the cleaning operation, and wherein said cleaning layer has a thickness within a range of 10 to 500 μm.

22. (new): A cleaning sheet for removing foreign matter adhering on a tip of a probe needle of a probe card, comprising a cleaning layer having a surface, the surface of the cleaning layer forming one surface of the cleaning sheet, wherein the cleaning layer contains a urethane polymer and a vinyl polymer comprising an acrylic polymer, wherein said cleaning layer contains no additives, wherein the cleaning layer has an initial elastic modulus within a range of 0.5-100 N/mm² and is adapted to receive penetrating probe needles and remove and retain impurities on a tip of said probe needles such that there will be no re-adhering of the foreign matter or the cleaning layer material on the probe needle after the cleaning operation, and wherein said cleaning layer has a thickness within a range of 10 to 500 μm.

23. (new): The cleaning sheet as claimed in claim 22, further comprising a backing layer.

24. (new): The cleaning sheet as claimed in claim 23, further comprising a pressure-sensitive adhesive layer, wherein the cleaning layer is provided on one surface of the backing layer and the pressure-sensitive adhesive layer is provided on another surface of the backing layer.

25. (new): A transporting member comprising a support and the cleaning layer of claim 22 provided on the support.

26. (new): A method of producing a cleaning sheet, comprising the steps of:

reacting a polyol and a polyisocyanate in the presence of a vinyl monomer to form a urethane polymer, thereby forming a mixture containing the urethane polymer and the vinyl monomer;

coating the mixture on a release sheet or a backing layer:

and

irradiating the coated mixture with radiation to cure the mixture to form the cleaning layer,

wherein said cleaning layer contains no additives, wherein the cleaning layer has an initial elastic modulus within a range of $0.5\text{-}100\text{ N/mm}^2$ and is adapted to receive penetrating probe needles and remove and retain impurities on a tip of said probe needles such that there will be no re-adhering of the foreign matter or the cleaning layer material on the probe needle after the cleaning operation, and wherein said cleaning layer has a thickness within a range of 10 to $500\text{ }\mu\text{m}$.

27. (new): A method of cleaning a probe needle, comprising contacting a cleaning layer of the cleaning sheet with a probe needle of a probe card having a tip to remove foreign matter adhering on the tip of the probe needle, wherein said cleaning sheet comprises a cleaning layer having a surface, wherein the surface of the cleaning layer forms one surface of the cleaning sheet, wherein the cleaning layer contains a urethane polymer and a vinyl polymer comprising an acrylic polymer, wherein said cleaning layer contains no additives, wherein the cleaning layer has an initial elastic modulus within a range of $0.5\text{-}100\text{ N/mm}^2$ and is adapted to receive penetrating probe needles and remove and retain impurities on a tip of said probe needles such

that there will be no re-adhering of the foreign matter or the cleaning layer material on the probe needle after the cleaning operation, and wherein said cleaning layer has a thickness within a range of 10 to 500 μm .

28. (new): A method of cleaning a probe needle, comprising contacting a cleaning layer of a transporting member with a probe needle of a probe card having a tip to remove foreign matter adhering on the tip of the probe needle, wherein said transporting member comprises a support and a cleaning layer having a surface, wherein the surface of the cleaning layer forms one surface of the transporting member, wherein the cleaning layer contains a urethane polymer and a vinyl polymer comprising an acrylic polymer, wherein said cleaning layer contains no additives, and wherein the cleaning layer has an initial elastic modulus within a range of 0.5-100 N/mm^2 and is adapted to receive penetrating probe needles and remove and retain impurities on a tip of said probe needles such that there will be no re-adhering of the foreign matter or the cleaning layer material on the probe needle after the cleaning operation, and wherein said cleaning layer has a thickness within a range of 10 to 500 μm .